# EL CENTRO REPOWER PROJECT

Small Power Plant Exemption (06-SPPE-2)
Imperial County

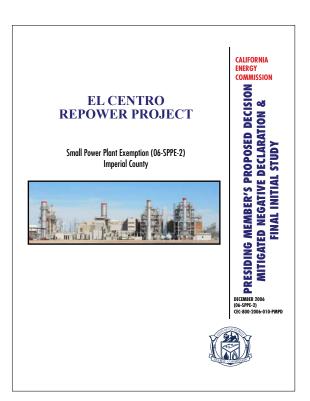


CALIFORNIA ENERGY COMMISSION

# IDING MEMBER'S PROPOSED DECISION

DECEMBER 2006 (06-SPPE-2) CEC-800-2006-010-PMPD





# CALIFORNIA ENERGY COMMISSION

1516 9th Street Sacramento, CA 95814 http://www.energy.ca.gov/sitingcases/elcentro/index.html



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## **TABLE OF CONTENTS**

EXECUTIVE SUMMARY			
PROJECT DESCRIPTION	3		
FINDINGS	5		
FINAL INITIAL STUDY & PROPOSED NEGATIVE DECLARATION (Incorporated by Reference)	Section		
(Available at www.energy.ca.gov/sitingcases/elcentro)			
Executive Summary	i		
Proposed Mitigated Negative Declaration	iv		
Introduction	1		
Project Description	2		
Air Quality	3		
Biological Resources	4		
Cultural Resources	5		
Energy Resources	6		
Geology, Mineral Resources & Paleontology	7		
Hazardous Materials Management	8		
Land Use, Recreation & Agricultural Resources	9		
Noise & Vibration	10		
Public Health	11		
Socioeconomics	12		
Soil & Water Resources	13		
Traffic & Transportation	14		
Transmission Line Safety & Nuisance	15		
Transmission System Engineering	16		
Visual Resources	17		
Waste Management	18		
General Conditions of Exemption	10		

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### **EXECUTIVE SUMMARY:**



The California Energy Commission is the State agency granted exclusive authority to review and license proposals to construct and operate large electric power plants, including the authority to exempt proposals under 100 MW from our certification review. Proposals granted an exemption are subject to local permitting processes. On May 19, 2006, the Imperial Irrigation District (IID) filed an application for a Small Power Plant Exemption (SPPE) for the El Centro Repower Project.

The Energy Commission Committee assigned to the El Centro Repower Project conducted an Evidentiary Hearing on December 19, 2006, and on the basis of the uncontested record, which includes the Staff's Final Initial Study and Proposed Negative Declaration (incorporated by reference), recommends granting a Small Power Plant Exemption to the Imperial Irrigation District (IID) for its 128 MW power plant project in El Centro, California, together with the following highlighted measures to mitigate potential environmental and community impacts and comply with applicable laws, ordinances, regulations and standards (LORS):

# PROJECT DESCRIPTION:

IID proposes to replace an existing steam-generating unit within the site of the existing El Centro Generating Station (ECGS) to serve the growing electrical load demands of the region.

The proposed project will replace an existing boiler with a General Electric Frame 7EA dry low NOx combustion turbine generator and heat recovery steam generator to supply steam to the existing steam turbine generator. The generator output from the Unit 3 Repower will be interconnected with the existing 92-kV portion of the existing IID El Centro Switching Station, also located within the ECGS property. Most of the existing Unit 3 plant systems will continue to be used with only minor modifications. The proposed project will increase the existing Unit 3 generating capacity by 84 megawatts (MW) from 44 MW to 128 MW.

Annual water consumption for the Unit 3 Repower will be limited to 1,029 acre-feet annually. The existing ECGS uses raw water

from IID's Dogwood surface canal Gate 54B for cooling tower make-up. An existing demineralization system treats the raw water to provide high quality make-up water. These existing systems will be used to meet the expected water requirements for the proposed project.

To address National Pollutant Discharge Elimination System (NPDES) permit requirements, IID plans to install a deep well injection system for wastewater from the entire ECGS site. The recommended system consists of two Class I non-hazardous wastewater deep injection wells approximately 2,500 feet below ground surface. With installation of the deep well injection system, cooling tower blow-down and other process wastewater streams will be discharged into a deep well injection system. Since the new deep well injection wastewater disposal system is needed for the entire ECGS Site, IID is obtaining its permits separately from this SPPE.

The Unit 3 Repower will interconnect to the existing Southern California Gas Company high pressure gas metering station located on the existing ECGS property. The connection will occur via two existing pipelines running south from the Gas Company's Niland regulating station to the ECGS.

The El Centro Unit 3 Repower project will be equipped with Best Available Control Technology (BACT) to control air pollutant emissions. The equipment used to control emissions consists of an anhydrous ammonia-based Selective Catalytic Reduction (SCR) system and carbon monoxide (CO) oxidation catalyst emission control system to further reduce emissions down to 2 ppm NOx and 4 ppm CO.

LOCAL ECONOMIC BENEFITS:

The start of commercial operation is expected in May 2009. IID estimates the construction costs of the Unit 3 Repower to be \$73.5 million; the construction payroll is estimated to be \$18.4 million. Total sales taxes during construction are estimated at \$5.4 million.

The IID expects to employ a maximum of 98 construction workers, with an average of 73, over a 20 month period beginning in September 2007. Operation of the project will require no additional workers. Annual operation costs are estimated to be approximately \$3.5 million. As a public agency, IID is exempt from property taxes and school impact fees.

### **DISCUSSION:**

No areas have been identified in the Environmental Checklist of the Final Initial Study as having the potential for significant environmental impacts. During the Evidentiary Hearing, the Committee received clarifications to Conditions AQ-SC7, WASTE-4, the General Conditions of Exemption, and the discussion of natural gas availability in the Final Initial Study. All of these clarifications are not significant and do not require republication of the Final Initial Study. All clarifications are in Appendix A, "Errata to the Final Initial Study," attached.

### **FINDINGS:**

Based upon the entirety of the uncontested record in this proceeding, including the Small Power Plant Exemption Application, Applicant's Data Responses, the Energy Commission Staff's Draft and Final Initial Study and Proposed Mitigated Negative Declaration, and comments by agencies and others, the Commission makes the following findings:

- With the mitigation measures and Conditions of Exemption of the Final Initial Study, clarified by the attached Errata and incorporated by reference, and compliance therewith verified by a reporting and monitoring program, the project will cause no unmitigated significant environmental impacts or adverse impact to energy resources.
- 2. The project is granted a Small Power Plant Exemption under Public Resources Code section 25541.
- The Proposed Mitigated Negative Declaration and Final Initial Study were prepared in compliance with the California Environmental Quality Act and all applicable State and Commission Guidelines.

Dated: December 20, 2006 ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT

COMMISSION

Original signed by
JEFFREY D. BYRON
Commissioner and Presiding Member
El Centro SPPE Committee

\_\_\_Original signed by
JAMES D. BOYD
Vice Chair and Associate Member
El Centro SPPE Committee

### Appendix A – Errata to Final Initial Study

### Page 3-14

# AIR QUALITY Table 7 Estimated Annual Emission Changes Due to Proposed Unit 3 Repower Project (tons per year (TPY])

	NOx	CO	VOC	PM10	SOx
Proposed CTG/HRSG	<del>37.18</del>	4 <del>7.51</del>	4 <del>.79</del>	23.40	<del>7.52</del>
	<u>42.02</u>	<u>51.03</u>	<u>5.21</u>		<u>7.72</u>
Historical Unit 3 Emissions	51.82	26.61	1.74	4.43	0.5
Net Emission Changes	- <del>14.64</del>	+20.90	+3.05	+18.97	+7.02
	- <u>9.8</u>	+ <u>24.42</u>	+ <u>3.47</u>		+ <u>7.22</u>

### Page 3-22

<u>AQ-SC7</u>: The project owner shall surrender 6.10 tons of NOx emission reduction credits (ERC), 9.62 tons of PM10 ERC, and 42.42 tons of Sox ERC Emission Reduction Credits generated from Unit 3 shut down equivalent to 42.02 tons of NOx, 1.74 tons of ROC [VOC], 4.43 tons of PM10 and 0.5 tons of SOx prior to Unit 3 Repower Project initial startup, plus ERC Certificates equivalent to 6.94 tons of NOx ERC, 42.62 tons of SO2 ERC, and 6.92 tons of non-combustion PM10 ERC, prior to state of construction of the project.

<u>Verification:</u> (Unchanged)

### Page 6-3

### **ENERGY RESOURCES**

SoCalGas will be able to continue firm service at the current level. Incremental supply to meet the larger than current power plant would have to be on an interruptible basis from SoCalGas unless SoCalGas expands its current pipeline capacity. SoCalGas could expand its system to provide firm transportation service to the larger power plant if the North Baja pipeline lateral for any reason is not built. To expand the capacity of the Imperial Valley System by 15 mmcfd to a total of 105 mmcfd, 10 miles of 24-inch diameter pipeline would need to be installed parallel to the existing transmission system from Brawley, California to El Centro, California. The proposed North Baja pipeline extension would also provide firm service to meet all the needs of the new power plant.

Pursuant to California Public Utilities Commission (CPUC) Decisions D.02-11-073 and D.06-09-039, for local transmission capacity SoCalGas is obligated to meet firm noncore demand in a 1 in 10 year cold weather demand condition. For areas of the local transmission system that are constrained or expected to be constrained, firm capacity is awarded to noncore customers in open seasons. Expansion decisions are to be based both on open season results and traditional system planning.

Based on the results of the last open season, in which firm service requests were slightly prorated in the summer season, as well as new customer load coming online starting in 2007, absent other factors SoCalGas would expect to begin work on expanding capacity in the Imperial Valley very soon. However, as noted in IID's SPPE Application, IID has executed a Precedent Agreement with North Baja pipeline for a 46 mile lateral providing approximately 110 mmcfd of pipeline capacity (as compared to SoCalGas's current total capacity in the Imperial Valley of 91 mmcfd). If IID takes service for ECGS from North Baja, then no capacity expansion would be needed on the SoCalGas Imperial Valley System within SoCalGas's planning horizon. SoCalGas does not plan to undertake any expansion in the Imperial Valley before the outcome of the Precedent Agreement is resolved.

The proposed North Baja pipeline extension would also be able to provide firm service to meet all the needs of the new power plant.

### Page 18-6

**WASTE 4:** The project owner shall ensure that a specific protocol for handling contaminated groundwater that may be produced during construction dewatering is included in the NPDES permit developed for the project prior to construction.

<u>Verification:</u> At least 30 days prior to the start of project grading, the project owner shall provide the Energy Commission CPM verification from the CRBRWQCB that the NPDES permit for the project includes a plan has been approved outlining a specific protocol for handling contaminated water produced during project construction.

### Page 19-6

# POST CERTIFICATION EXEMPTION CHANGES TO THE ENERGY COMMISSION DECISION

For the life of the project, Prior to project operation, IID must provide written notification to the CPM when planning changes to the project description. Once the project is operating, any changes to the project description must go through the local agencies for review. When a proposed change affects the conditions of exemption, IID must file a

petition for the change with the CPM. The petition must contain the following information:

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